AR 15 2002 SHEET

Homel Prawn
Attorney Docket No. 70629

THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):

Crawford, et al.

Serial No.:

09/994,519

Filed:

November 26, 2001

For:

METHOD FOR ESTIMATING CARRIER-TO-NOISE-PLUS-INTERFERENCE RATIO (CNIR) FOR OFDM WAVEFORMS AND THE USE THEREOF FOR DIVERSITY ANTENNA BRANCH SELECTION

Group Art Unit:

2681

Examiner:

TBD

I hereby certify that this paper is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Commissioner for Patents

on this date.

Washington, D.C. 20231

04/02/02 Date

Scott J. Mengrini Registration No. 42,880 Attorney for Applicant(s)

TRANSMITTAL OF FORMAL DRAWINGS

Commissioner for Patents Washington, D.C. 20231

Attention: Official Draftsman

Dear Sir:

We respectfully submit herewith nineteen (19) sheets of formal drawings relative to the above-identified matter.

The Notice of Allowance for this matter has not yet been received.

Respectfully submitted,

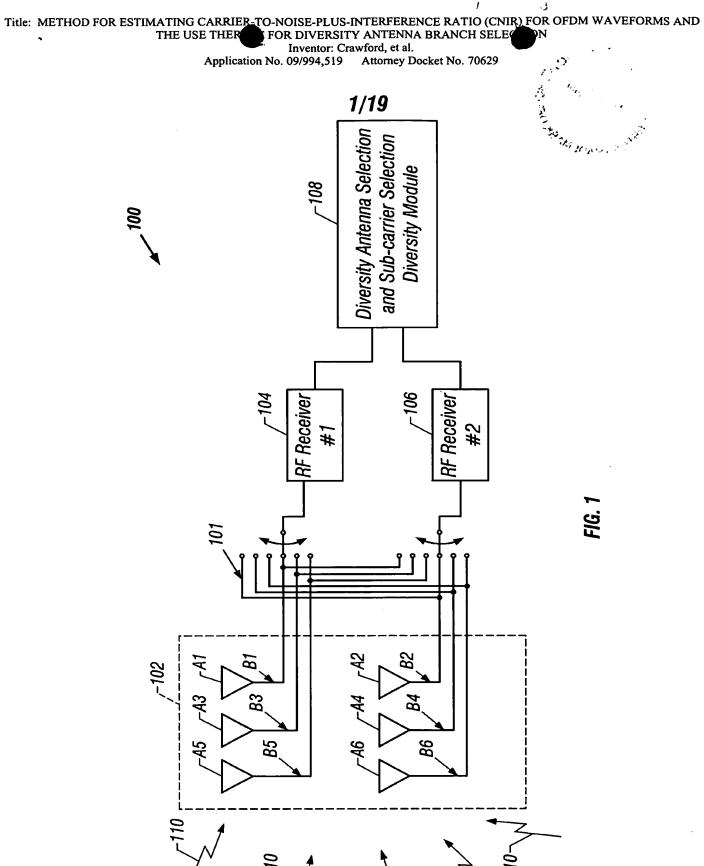
FITCH, EVEN, TABIN & FLANNERY

Scott J. Menghini

Reg. No. 42,880 April 2, 2002

Address all correspondence to:

FITCH, EVEN, TABIN & FLANNERY Suite 1600-120 S. La Salle Street Chicago, IL 60603 (858) 552-1311



Inventor: Crawford, et al.

Application No. 09/994,519 Attorney Docket No. 70629

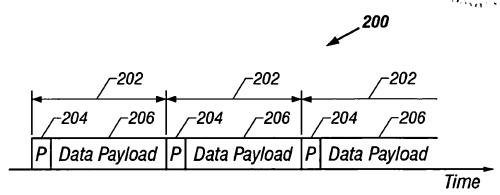


FIG. 2 (Prior Art)

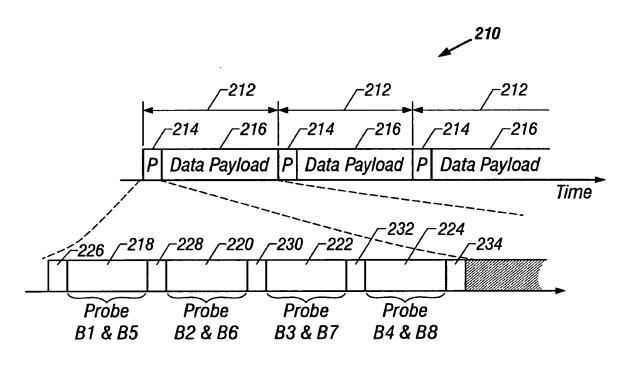
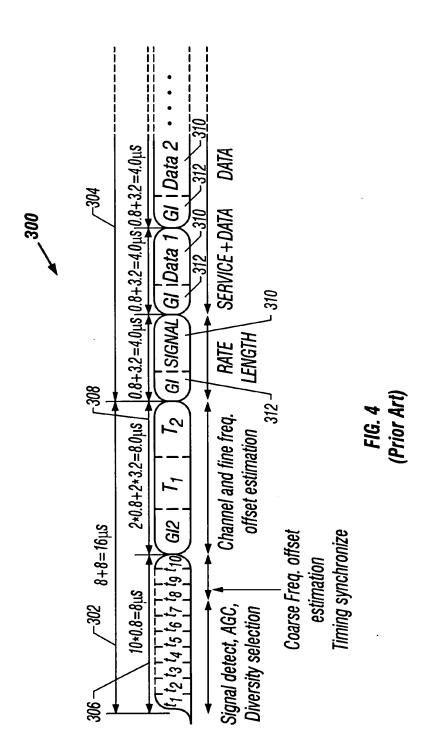
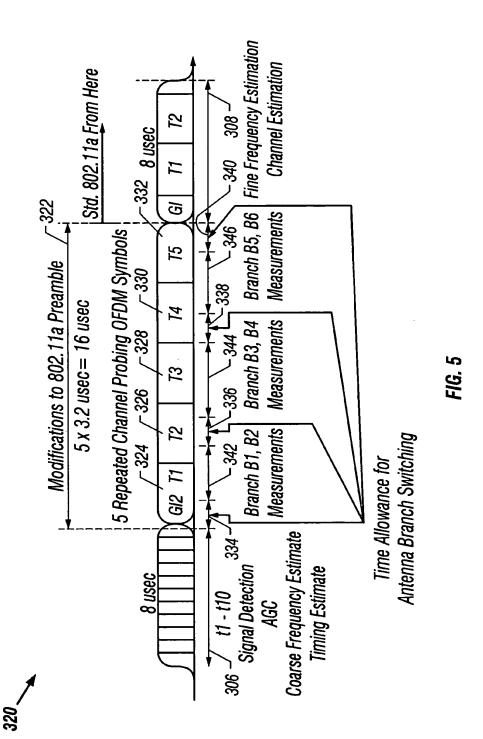
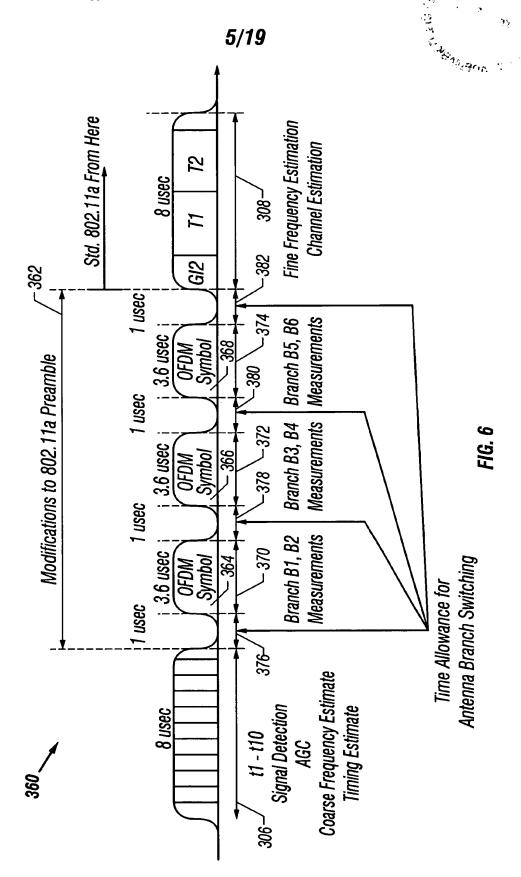
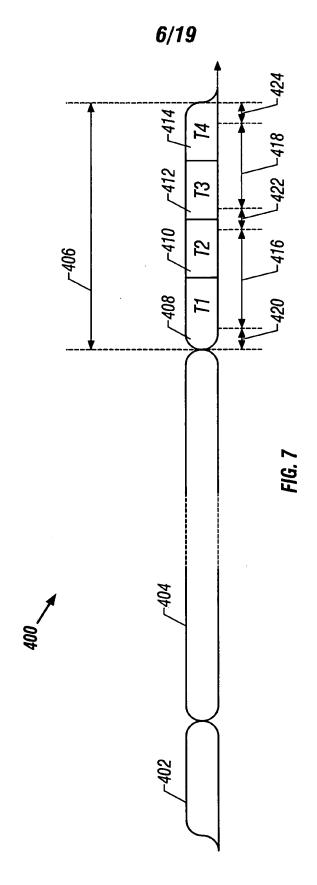


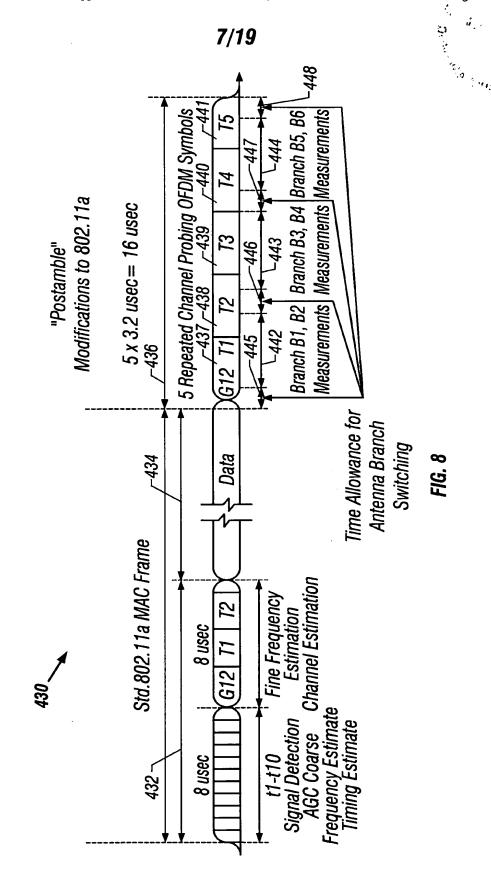
FIG. 3

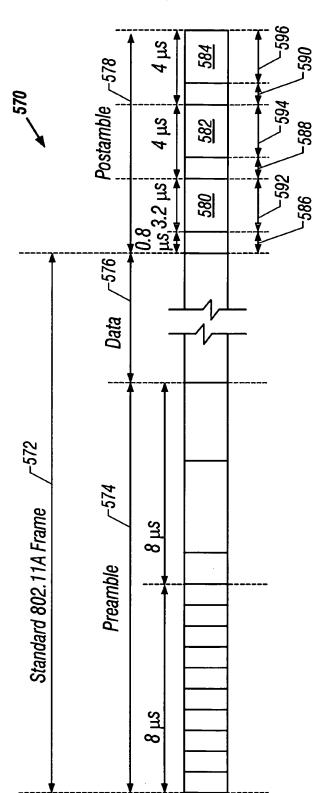


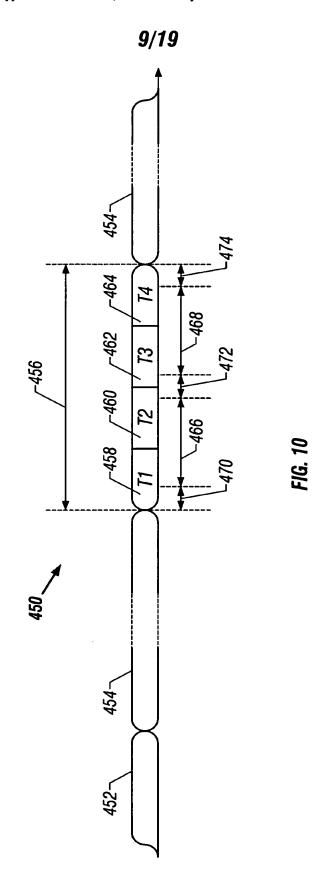




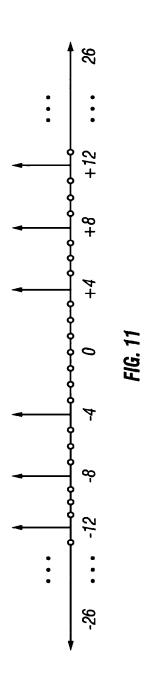


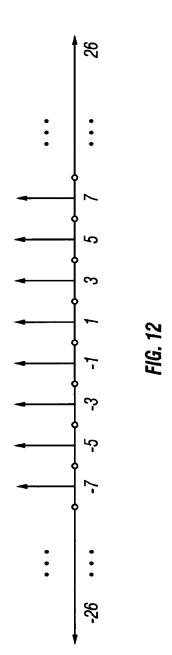


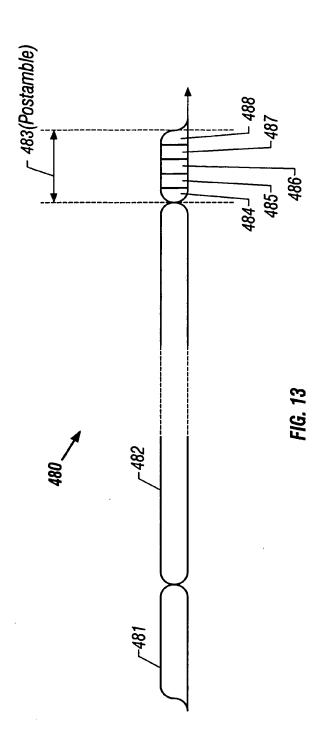




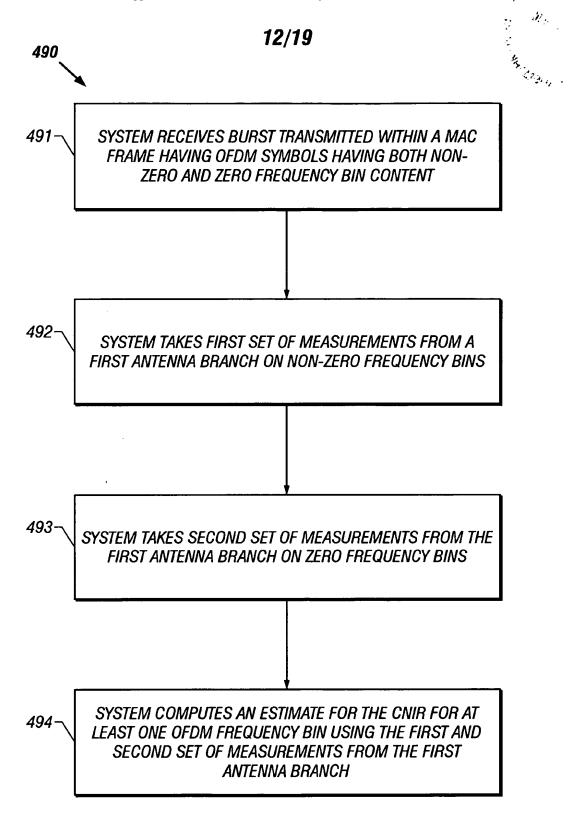


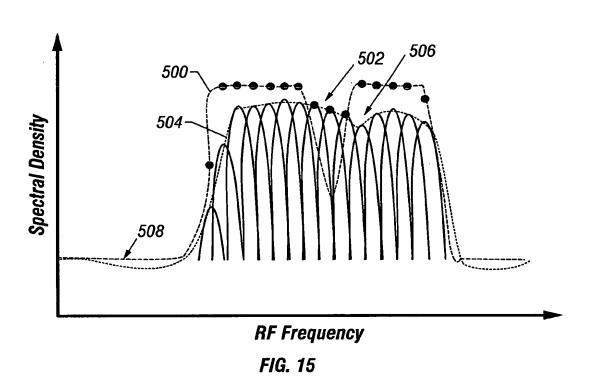






Inventor: Crawford, et al.
Application No. 09/994,519 Attorney Docket No. 70629





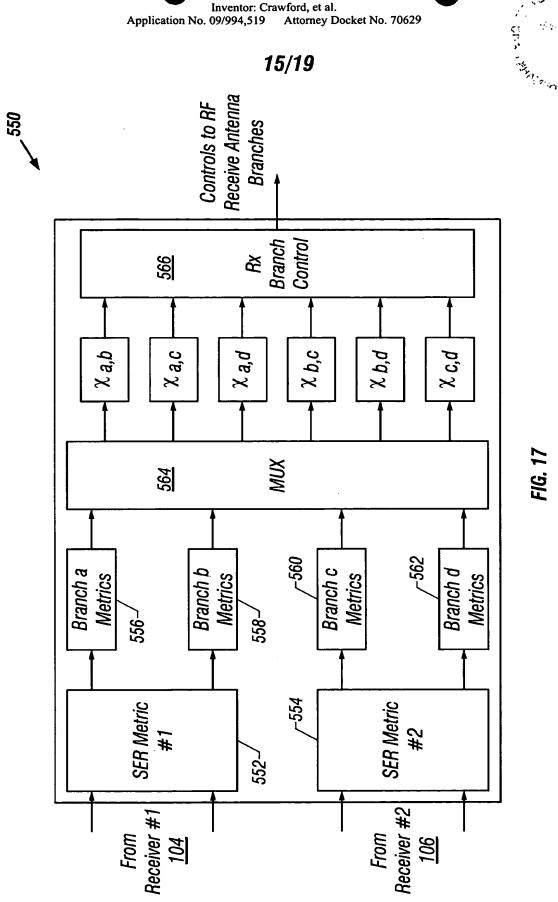
Inventor: Crawford, et al. Application No. 09/994,519 Attorney Docket No. 70629 14/19 510 -512 MEASURE $(I_k, Q_k)_l$ FOR RECEIVE DIVERSITY BRANCHES DURING DIVERSITY SELECTION PORTION 514 COMPUTE THE DETECTION STATISTIC, $\Lambda_{k,l}$, FOR EACH FFT BIN 516 COMPUTE $Q(\Lambda_{k,l})$ FOR EACH RECEIVE BRANCH COMPUTE χ_{ij} FOR ALL POSSIBLE RECEIVE BRANCH PAIRINGS (i,j) AS 518 $\chi_{i,j} = \sum_{\nu} min \{Q(\Lambda_{k,i}), Q(\Lambda_{k,j})\}$ *520* CHOOSE $\chi_{i,j}$ HAVING SMALLEST VALUE

RETAIN RECEIVE BRANCHES CORRESPONDING TO INDICES i and j OF THE $\chi_{i,j}$ HAVING SMALLEST VALUE

522

Inventor: Crawford, et al. Attorney Docket No. 70629 Application No. 09/994,519





Receiver #1 104

Point FF Receiver #2 <u>106</u>

₽ Figit

